

MEMO

TO: The Honorable Co-Chairs of the Legislative Commission on Global Climate Change, Rep. Pricey Harrison and Mr. John L. W. Garrou

FROM: Commissioner Dr. Stephen A. Smith

CC: Mariah Matheson, mariahm@ncleg.net

RE: Bioenergy Proposals for Final Report Recommendations

DATE: February 8, 2010

Build on private sector interest in biochar for carbon-negative bioenergy.

Carbon-negative bioenergy is the production of biofuels or biopower with the co-production of biochar, a form of carbon-sequestration. Within the Southeast region, North Carolina has an exceptional amount of private sector interest in these technologies. These developments should be encouraged by the General Assembly with an eye to NC becoming a national center for carbon-negative bioenergy. State-level incentives are needed to encourage the purchase of technology that uses biomass to release energy while sequestering carbon. Statewide research is needed in different soil types to determine the benefits and economics of biochar as a soil amendment.

Ensure Sustainable Utilization of Biomass. Both biofuels and biopower rely upon sustainability of supplies of biomass as a source of renewable energy (bioenergy). To ensure that bioenergy is truly sustainable and renewable, it must come from specific sources (http://bit.ly/biomass_consensus) and must be grown, produced, and harvested in a manner that ensures the ability of future North Carolinians to meet their food and energy needs. In-state consumers and processors of biomass should consider tracking biomass from the point of origin using GPS technology. The legislature should require a thorough scientific examination of the positive and negative environmental impacts of increased utilization of biomass five years after implementation of SB3, or five years after the first commercial production of cellulosic biofuels, whichever comes first.